

UNITED STATES OF AMERICA
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Before Commissioners:

Robert G. Taub, Chairman;
Tony Hammond, Vice Chairman;
Mark Acton; and
Nanci E. Langley

Periodic Reporting
(Proposal One)

Docket No. RM2018-4

ORDER ON ANALYTICAL PRINCIPLES
USED IN PERIODIC REPORTING (PROPOSAL ONE)

(Issued July 13, 2018)

I. INTRODUCTION

On May 17, 2018, the Postal Service filed a petition pursuant to 39 C.F.R. § 3050.11 requesting the Commission to initiate a rulemaking proceeding to consider a proposal to change an analytical methodology used in periodic reporting.¹ Proposal One would change the procedures for collection of Rural Carrier Cost System (RCCS) data and the procedures for estimating volume proportions used to distribute costs among certain Delivery Point Sequence (DPS) mail. Proposal One at 1.

Accompanying Proposal One was a flow chart that provided details regarding the mapping of products to mail codes. *Id.* at 3; see RCCS MailCode Flow Chart.xlsx.

¹ Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposal One), May 17, 2018, at 1 (Petition). The proposal is attached to the Petition (Proposal One).

Additional details regarding the Postal Service's proposed procedures were provided in an attached PDF document. Proposal One at 3; see Prop.1.RCCS-Digital_Documentation.pdf. Proposal One's expected impact was set forth in a table and accompanying Excel file. Proposal One at 4; see Prop.1.RCCS_Digital_Impact.xlsx. On June 7, 2018, the Postal Service filed revisions to the final two pages of its proposal together with a revised version of an Excel impact file.²

The proposed methodology uses digitally scanned mail characteristics data from the Origin-Destination Information System – Revenue, Pieces, and Weight (ODIS-RPW) to enhance the RCCS estimation of delivered DPS volumes and eliminate the need to manually sample a large portion of DPS mail. Proposal One at 1. For the reasons given below, the Commission approves Proposal One.

II. PROCEDURAL HISTORY

On May 22, 2018, the Commission issued a notice initiating this proceeding, providing for the submission of comments, and appointing a Public Representative.³ On May 31, 2018, the Public Representative filed a motion seeking issuance of an information request.⁴ The Postal Service filed a response on June 7, 2018.⁵ Chairman's Information Request No. 1 was issued on June 8, 2018.⁶ The Postal Service responded to CHIR No. 1 on June 11, 2018.⁷ The Public Representative filed

² Notice of the United States Postal Service of Revised Table and Associated Worksheet Regarding Proposal One—Errata, June 7, 2018 (Errata), Proposal One revised pages 4 and 5; Prop.1.RCCS_Digital_Impact_Rev.6.7.xlsx (Postal Service Excel Impact File).

³ Notice of Proposed Rulemaking on Analytical Principles Used in Periodic Reporting (Proposal One), May 22, 2018 (Order No. 4610).

⁴ Public Representative Motion for Issuance of Information Request, May 31, 2018.

⁵ Response of the United States Postal Service to Public Representative Motion Regarding Information Request, June 7, 2018 (Response to PR Motion).

⁶ Chairman's Information Request No. 1, June 8, 2018 (CHIR No. 1).

⁷ Response of the United States Postal Service to Question 1 of Chairman's Information Request No. 1, June 11, 2018 (Response to CHIR No. 1).

comments on June 12, 2018.⁸ On June 19, 2018, the Postal Service filed reply comments.⁹ No other persons have filed comments.

III. PROPOSAL ONE

Proposal One is intended to change the current RCCS methodology for estimating DPS mail volume proportions. Proposal One at 1. Proposal One mirrors Proposal Nine, previously approved by the Commission, which proposed the use of digital image samples for the City Carrier Cost System (CCCS).¹⁰

The Postal Service currently collects similar mail characteristics data, such as class and product data, by means of two different systems: RCCS and ODIS-RPW. Proposal One at 1-2. RCCS data are used primarily to distribute costs to products delivered by rural letter routes. *Id.* at 2. ODIS-RPW data are used to estimate volume and revenue. *See id.* The Postal Service collects RCCS mail characteristics data manually. *Id.* In contrast, the Postal Service collects ODIS-RPW mail characteristics data from digitally captured images of letter and card shaped mail.¹¹

The Postal Service proposes a methodology change that would use the ODIS-RPW digital data to enhance RCCS data for DPS mail destined for delivery by rural letter routes. *Id.* at 2. The Postal Service states that Proposal One would eliminate the need to manually sample a large portion of DPS mail because the ODIS-RPW digital sampling frame covers approximately 75 percent of the RCCS sampling frame of rural letter routes. *Id.* The Postal Service states that it would continue to manually sample

⁸ Public Representative Comments, June 12, 2018 (PR Comments).

⁹ Reply Comments of the United States Postal Service Regarding Proposal One, June 19, 2018 (Postal Service Reply Comments).

¹⁰ See Docket No. RM2017-13, Order on Analytical Principles Used in Periodic Reporting (Proposal Nine), December 15, 2017 (Order No. 4278).

¹¹ *Id.*; see generally Docket No. RM2015-11, Order on Analytical Principles Used in Periodic Reporting (Proposal Three), September 30, 2015 (Order No. 2739). It should nevertheless be noted that not all ODIS-RPW mail characteristic data can be captured digitally. See Proposal One at 3.

mailpieces destined for rural letter routes not included in ODIS-RPW's digital sampling frame. *Id.* at 3.

IV. CHAIRMAN'S INFORMATION REQUEST

CHIR No. 1 requested the Postal Service to confirm that the methodology employed in Proposal One is identical to the methodology of Proposal Nine's sampling and estimation strategies and that the two proposals differ only in the data that each uses. CHIR No. 1, question 1.a. Alternatively, CHIR No. 1 requested the Postal Service to explain how the methodologies and data used in Proposal One and Proposal Nine differ. Response to CHIR No. 1, question 1.b.

In its response, the Postal Service confirms that the Proposal Nine and Proposal One methodologies are identical in all material respects, although because of underlying differences between CCCS and RCCS, stratification is applied to the digital sampling frame for CCCS but not for RCCS. *Id.* question 1.a.

V. COMMENTS

The Public Representative was the only person to file initial comments on Proposal One. The Public Representative raises what he characterizes as "several modest concerns." PR Comments at 4 (footnote omitted).

First, the Public Representative notes that the offset for Proposal One's reduction of the distribution keys for First-Class Presort Letters and Marketing Mail Letters produces a disproportionately large increase in the distribution keys for Marketing Mail, High Density and Saturation Letters, and states that the Postal Service has not provided an explanation for the offset. *Id.*

Second, the Public Representative asserts that the Postal Service's presentation of the unit cost impact on products delivered by rural carriers is inaccurate. *Id.* at 5.

Third, the Public Representative alleges that the Postal Service has made errors in estimating unit product costs thereby raising the possibility that revised product

values provided by the Postal Service are not based on Proposal One's proposed methodology. *Id.* at 7-8.

Fourth, the Public Representative asserts that the Postal Service should be able to easily provide an estimate of the percentage change in coefficients of variation (CVs) for its current and proposed methods and that this would help the Commission in considering all possible measures of potential impacts. *Id.* at 8-9.

In reply comments, the Postal Service addresses concerns raised by the Public Representative and takes the position that "nothing raised by the Public Representative should deter the Commission from approval of Proposal One." Postal Service Reply Comments at 1.

VI. COMMISSION ANALYSIS

Based upon a review of the Postal Service's filing, supporting documents, the Postal Service's Response to CHIR No. 1, and the comments filed by the Public Representative and the Postal Service, the Commission approves Proposal One because it should improve the quality, accuracy, and completeness of the Postal Service's mail characteristics data for DPS mail used in the RCCS.

Use of ODIS-RPW digitally sampled data in the RCCS. The Commission finds that Proposal One builds on the opportunity presented by the use of ODIS-RPW digitally sampled data to substantially reduce the need to manually sample DPS mailpieces in RCCS. In doing so, Proposal One essentially replicates and adapts the methodology already applied in Proposal Nine for estimating DPS volume proportions for city letter routes.

In Proposal One, the Postal Service requests approval to use data from ODIS-RPW digital samples destined for delivery by rural carriers to enhance the estimation of RCCS delivered DPS volumes and replace a large portion of manual sampling of DPS letter trays by RCCS data collectors. Proposal One at 1. The Commission finds that the proposed methodology to link the ODIS-RPW data to RCCS mailcodes is

reasonable and should provide a reliable relationship between the ODIS-RPW digital ZIP-Days based data and the data elements used by RCCS. In this regard, the Commission finds that changing the RCCS sampling frame to the Universal Delivery Statistics File in order to align the RCCS-Digital frame with the ODIS-RPW Digital frame will enhance the precision of the mapping between the ODIS-RPW data and the data elements used by RCCS.¹²

As in Order No. 2739 and Order No. 4278, the Commission finds that use of digitally sampled data will mitigate sampling bias resulting from manual data collection and will improve the quality and accuracy of RCCS DPS mail data. Additionally, use of ODIS-RPW digital data will increase the number of DPS sampled mailpieces and the number of RCCS tests, thus making RCCS DPS mail data more complete.¹³

For these reasons, the Commission finds that Proposal One improves the quality, accuracy, and completeness of the data for DPS mail destined for delivery by rural letter routes.

Public Representative concerns. The Public Representative raises four sets of concerns related to Proposal One.

The first concern is about outliers that appear in the variation of the distribution keys obtained from applying the proposed methodology, compared to the existing methodology. Specifically, the Public Representative notes that the offset for Proposal One's reduction of the distribution keys for First-Class Presort Letters and Marketing Mail Letters produces a disproportionately large increase in the distribution keys for Marketing Mail, High Density and Saturation Letters.

Differences between the product distribution keys shown in Column I (under the existing methodology) and Column J (under the proposed methodology) are driven

¹² See Prop.1.RCCS-Digital_Documentation.pdf at 2.

¹³ See Proposal One at 4. The Postal Service states that the ODIS-RPW digital sampling frame of ZIP-Days covers approximately 75 percent of the RCCS frame of rural routes and the use of ODIS-RPW digital data destined for rural carrier routes would increase the number of DPS sampled mailpieces by approximately 450 percent and the number of RCCS tests would increase by approximately 330 percent. *Id.*

entirely by differences in the volumes used to calculate product distribution keys under the two methodologies. See Postal Service Excel Impact File, tab “Impact,” Column I (distribution keys under existing methodology), Column J (distribution keys under proposed digital methodology), and Column G (percentage change in volumes). For products with comparable percentage changes in volume in Column G, the ratio between revised product distribution keys would be nearly equal to the ratio between existing product distribution keys.¹⁴

At the product level, changes in distribution keys under either the current or the proposed methodology, or from the current to the proposed methodology, are produced by corresponding changes in volume. Consequently, it should not be surprising that sampling error generates changes in the distribution key for any one product that would be larger or smaller than changes in the distribution keys for other products. Accordingly, the mere existence of “outliers” in the changes to the distribution keys does not constitute evidence that the Postal Service’s proposed digital method produces product-specific biases in the computation of distribution keys.

The Public Representative’s second concern is that the Postal Service’s presentation of the unit cost impact on products delivered by rural carriers is inaccurate. PR Comments at 5. However, after performing a sensitivity analysis based on the alternative use of RPW volumes, combined RPW volumes, estimated RCCS and CCCS volumes, and combined RCCS and CCCS volumes, the Public Representative states that “the results still show that Proposal One results in minimal unit cost changes for either city or rural delivery unit product costs.” PR Comments at 7.

The Postal Service asserts that the Public Representative has misconstrued the intent of the Postal Service’s estimate of Proposal One’s impact to be an estimate of the

¹⁴ For example, the percentage change in volumes for First-Class-Mail Presort Letters and Marketing Standard Mail Letters are quite close, namely, (-2.09) % and (-1.83)%, respectively. See Postal Service Excel Impact File, tab “Impact,” Column G. As a result, the ratio of the revised distribution keys for these two products in Column J ($10648285/14032739=0.75679$) is close to the ratio of the existing distribution keys for these two products in Column I ($10845277/14293900=0.758735$). See *id.* Column J and Column I.

effect on unit costs of products delivered by rural carriers. Postal Service Reply Comments at 1. The Postal Service states that its intent was instead to estimate the impact of Proposal One on overall unit costs of various products. *Id.* at 1-2. For these reasons, the Postal Service challenges the Public Representative's claim that the Proposal One unit cost impact presentation is not accurate. *Id.* at 2. Finally, the Postal Service questions the relevance of the Public Representative's discussion of unit cost impact given his acknowledgement that Proposal One's cost impact is minimal. *Id.* The Commission agrees with the Postal Service's characterization of its cost impact analysis and finds that the cost impact of Proposal One is minimal.

The Public Representative's third concern is that errors made by the Postal Service in estimating unit product costs suggest that the revised product values provided by the Postal Service are not produced by the proposed methodology. PR Comments at 7-8. In response to the Public Representative's motion for an information request, the Postal Service filed a revised spreadsheet in which it characterized the shortcomings in its original spreadsheet as "cosmetic deficiencies." Response to PR Motion at 1. The Public Representative challenges the Postal Service's calculation errors as more than cosmetic deficiencies. PR Comments at 7-8.

Whether or not the shortcomings of the original spreadsheet can fairly be characterized as "cosmetic deficiencies," the Public Representative acknowledges that "the unit product cost differentials are of the same order as those approved by the Commission [with respect to Proposal Nine], where the same sampling method was proposed for the CCCS." *Id.* at 8. The Commission concludes that the errors identified by the Public Representative do not materially affect unit product cost differentials and that those differentials are comparable to those produced by the same sampling methodology previously approved for the CCCS.

The Public Representative's fourth concern relates to the absence from the impact analysis of a comparison between the CVs of the volume estimates produced by Proposal One compared to the existing methodology. PR Comments at 8-9. The Public Representative states that a comparison of the existing and proposed product

level CVs “would help the Commission be certain its approval of this proposed change in rural delivery volume estimation has considered all possible measures of potential impacts.” *Id.* at 9.

In response, the Postal Service states that the digital data are not available for the entire FY 2017, so performance of a direct comparison with the CVs provided in the FY 2017 ACR is not possible. Postal Service Reply Comments at 2-3. The Postal Service also argues that “because the sample sizes using Digital image data are so much larger than in the current system, there is no question that the CVs will be correspondingly reduced.” *Id.* at 3 (footnote omitted).

The Commission understands from the Postal Service’s response that the computation of precision measures for the volume estimates in Proposal One should be possible when digital data are available for entire fiscal years and recommends that CVs estimation procedures for RCCS be finalized as soon as these data become available for use in future analyses. The Commission nevertheless agrees with the Postal Service that the absence of a comparison of CVs of volume estimates does not preclude approval of Proposal One.

VII. ORDERING PARAGRAPH

It is ordered:

For purposes of periodic reporting to the Commission, the changes in analytical principles proposed by the Postal Service in Proposal One are approved.

By the Commission.

Stacy L. Ruble
Secretary